UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

NOTICE OF ALLOWANCE AND FEE(S) DUE

	7590 04/12	/2002					
					EXAMINE	R	
John L. Cordani Carmody & Torrance, LLP				<u></u>	NICOLAS, WESLEY A		
50 Leavenworth Street P.O. Box 1110					ART UNIT	CLASS-SUBCLASS	
Waterbury, CT 06721-1110					1741	205-085000	
	J.			DAT	E MAILED: 04/12/2002	*	
APPLICATION NO. /	FILING DATE		FIRST NAMED INVENTO	R	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/698,370	10/26/2000		Ronald Redline		2156-056A	3380	
TITLE OF INVENTION: METHOD FOR ENHANCING THE SOLDERABILITY OF A SURFACE							
	ji.						
TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FI	EE TOTAL FEE(S) DUE	DATE DUE	
	nonprovisional	NO	\$1280	\$0	\$1280	07/12/2002	

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status.

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and mail this form, together with applicable fee(s), to:

Box ISSUE FEE

Assistant Commissioner for Patents

Washington, D.C. 20231

MAILING INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed

where appropriate. All fundicated unless correcte maintenance fee notifical	d below or directed oth	cluding the Patent, advance erwise in Block 1, by (a) specifying a new cor	respondence address, and		rate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 7590 04/12/2002			Note: The certificate of mailing below can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.				
John L. Cordan Carmody & Torn 50 Leavenworth P.O. Box 1110	rance, LLP Street				Certificate of Mailing	being deposited with the ge for first class mail in an dress above on the date	
Waterbury, CT (06721-1110					(Depositor's name)	
						(Signature)	
			Į		<u> </u>	(Date)	
A DRIVER TION NO	FILING DATE		FIRST NAMED INVENT	OR /	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
APPLICATION NO. 09/698,370	10/26/2000		Ronald Redline		2156-056A	3380	
TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY NO	ISSUE FEE \$1280	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE 07/12/2002	
	MINER	ART UNIT	CLASS-SUBCL 205-08500				
NICOLAS	S, WESLEY A	1741					
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form			the names of up or agents OR, single firm (ha attorney or age registered paten	nting on the patent front page, list (1) of up to 3 registered patent attorneys OR, alternatively, (2) the name of a n (having as a member a registered r agent) and the names of up to 2 patent attorneys or agents. If no name or name will be printed.			
PTO/SB/47) attached		TO DE PRINTED ON	THE DATENT (print o	r type)			
	ess an assignee is identifited to the USPTO or is l	neing Subillitied under sei	ata will appear on the parate cover. Completion	estant Inclusion of assis	•	ite when an assignment has gnment.	
Please check the approp	riate assignee category o	or categories (will not be p	printed on the patent)	□ individual □ co	orporation or other private	group entity 🖸 governmen	
4a. The following fee(s)	are enclosed:		b. Payment of Fcc(s):	. 60 6.70	.i		
☐ Issue Fee				t of the fee(s) is enclosed d. Form PTO-2038 is at			
☐ Publication Fee ☐ Advance Order - #			The Commissioner is Deposit Account Number	hereby authorized by ch	arge the required fee(s), or nelose an extra copy of this	credit any overpayment, to s form).	
The COMMISSIONER application identified al	OF PATENTS AND TR	RADEMARKS is request	ed to apply the Issue Fe	e and Publication Fee (i	f any) or to re-apply any p	reviously paid issue fee to th	
(Authorized Signature)		(Date)					

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignce or other party in interest as shown by the records of the United States Patent and Trademark Office.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, United States Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington, D.C. 20231

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/698,370	10/26/2000	Ronald Redline	2156-056A	3380	
09/096,370			EXAMINI	ER	
7590 04/12/2002 John L. Cordani			NICOLAS, WESLEY A		
Carmody & Torrance, LLP 50 Leavenworth Street			ART UNIT	PAPER NUMBER	
P.O. Box 1110	il ect		1741		
Waterbury, CT 06721-1110			DATE MAILED: 04/12/2002		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 107 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 107 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

	Application No.	Applicant(s)		
Notice of Allowahility	09/698,370	REDLINE ET AL.		
Notice of Allowability	Examiner	Art Unit		
	Wesley A. Nicolas	1741		
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 2. The allowed claim(s) is/are 9-16. 3. The drawings filed on are accepted by the Examine	(OR REMAINS) CLOSED in this apport or other appropriate communication GHTS. This application is subject to and MPEP 1308.	plication. If not included will be mailed in due c	d ourse. THIS	
4. ☐ Acknowledgment is made of a claim for foreign priority und a) ☐ All b) ☐ Some* c) ☐ None of the:	. , , , , , , ,		•	
 Certified copies of the priority documents have 				
Certified copies of the priority documents have	been received in Application No	<u> </u>		
 Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). 				
* Certified copies not received:				
5. Acknowledgment is made of a claim for domestic priority ur		onal application).		
(a) The translation of the foreign language provisional a	• •			
6. Acknowledgment is made of a claim for domestic priority ur	ider 35 U.S.C. §§ 120 and/or 121.			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the second o				
7. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which gives reas			OTICE OF	
 8. ☐ CORRECTED DRAWINGS must be submitted. (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No (b) ☐ including changes required by the proposed drawing of including changes required by the attached Examiner' 	correction filed, which has be	een approved by the Ex		
Identifying indicia such as the application number (see 37 CFR 1. of each sheet. The drawings should be filed as a separate paper	84(c)) should be written on the drawin with a transmittal letter addressed to	igs in the top margin (no the Official Draftsperson	t the back) ı.	
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T			ote the	
Attachment(s)				
 1 ☐ Notice of References Cited (PTO-892) 3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5 ☑ Information Disclosure Statements (PTO-1449), Paper No. 38 7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4☐ Interview Summa 4☐ Examiner's Amel	al Patent Application (P ary (PTO-413), Paper N ndment/Comment ement of Reasons for A	lo	

Art Unit: 1741

DETAILED ACTION

Allowable Subject Matter

- 1. Claims 9-16 are allowed over the prior art of record.
- 2. The following is an examiner's statement of reasons for allowance:

The specific process for improving the solderability of a metal surface which includes, *inter alia*, contacting the metal surface with an immersion silver plating solution thereby producing an immersion silver plate upon the metal surface, and thereafter treating the silver plated metal surface with a solution comprising an additive selected from the group consisting of fatty amines, fatty amides, quaternary salts, amphoteric salts, resinous amines, resinous amides, fatty acids, resinous acids, ethoxylated versions of any of the foregoing, and mixtures of any of the foregoing was not taught or suggested by the prior art of record.

With respect to the prior art of record, the reference of Wakita teaches the enhancement of solderability using silver plated copper powder and the addition of fatty acids to increase the dispersion, however the additives are added to the plating solution and are not used as a subsequent treatment after the layer is formed. The prior art of Ferrier (EP 0 797 380 A1) although it teaches of silver immersion plating, is silent with respect to subsequent treatment with a solution using an additive as claimed by Applicant.

Art Unit: 1741

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 09/698,370

Art Unit: 1741

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Wesley Nicolas whose telephone number is (703)305-

0082. The examiner can normally be reached on Mon.-Thurs. from 7am to 5pm.

The Supervisory Primary Examiner for this Art Unit is Roy King whose telephone

number is (703) 308-1146.

The fax number for this Group is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group receptionist whose telephone number is

(703)308-0661.

Wesley Nicolas

April 2, 2002

BRUCE F. BELL
PRIMARY EXAMINER

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